

PGDM-RM, 2018-20
MIS & ADVANCE EXCEL
RM-106

Trimester – I , End-Term Examination: September 2018

Time allowed: 2 Hrs 30 Min
Max Marks: 50

Roll No: _____

Instruction: Students are required to write Roll No on every page of the question paper, writing anything except the Roll No will be treated as **Unfair Means**. All other instructions on the reverse of Admit Card should be followed meticulously.

Sections	No. of Questions to attempt	Marks	Marks
A	3 out of 5 (Short Questions)	5 Marks each	$3 \times 5 = 15$
B	2 out of 3 (Long Questions)	10 Marks each	$2 \times 10 = 20$
C	Compulsory Case Study	15 Marks	15
		Total Marks	50

SECTION-A

Answer any 3 out of 5 (Short Questions) – 5 Marks each

QUESTION-A1 - What is normalization? How is it related to the features of a well-designed relational database?

QUESTION-A2 - How Amazon.com, YouTube.com, LinkedIn.com & Gaana.com are different from each other in terms of their Revenue Model? Explain

QUESTION-A3 - The internet may not make corporations obsolete, but corporations will have to change their business models. Do you agree? Why or why not?

QUESTION-A4 - Has e-commerce transformed marketing? Explain how social networking and the "wisdom of crowds" help companies improve their marketing.

QUESTION-A5 - To maintain relationship with customers, what is the role of channel partners and employees and what CRM systems can be used by companies? Explain

SECTION-B

Answer any 2 out of 3 (Long Questions) – 10 Marks each

QUESTION-B1 - A chocolate making company want to implement different types of information systems, suggest and elaborate different types of Information Systems with suitable examples on three parameters **1-** who will use which system? **2-** Frequency of decisions taken by them and **3** – What types of decisions can be taken by these systems?

QUESTION-B2 - Your friend Ramesh is hotel management graduate, he has started a canteen in a college, suggest him how to design a database having different entities related to his business to store information thus, maintaining integrity of the data.

QUESTION-B3 - Business firms invest heavily in information systems to achieve six strategic business objectives, Illustrate with suitable examples.

SECTION-C
Case study – 15 Marks

SCOTTS MIRACLE-GRO CULTIVATES SUPPLY CHAIN PROFICIENCY

When you have to make nearly all of your annual sales of 10 billion pounds of lawn fertilizer and other gardening products in a 10- to 14- week seasonal window, you realize the importance of an optimized supply chain. As the world's principal supplier of lawn and garden care products, the Scotts Miracle-Gro Company, headquartered in Marysville, Ohio, needed to optimize its entire supply chain—from shelf to supplier—in order to meet the needs of its seasonal, weather-dependent business.

When lawn care company, Scotts, and top gardening brand, Miracle-Gro, merged in 1995, a number of challenges arose. Customer lists overlapped, causing duplication of sales force efforts. Multiple supply chain designs conflicted, incompatible invoicing systems clashed, and multiple IT systems could not be coordinated to resolve the discord. The result was that despite holding the leading gardening and lawn care brands in the United States (Roundup and Ortho) in addition to the two that comprise its masthead, the Scotts Miracle-Gro Company suffered declining productivity and deteriorating customer service.

With execution during its peak-demand season suffering, the company embarked on an initiative dubbed "One Face to the Customer," that included \$100 million to upgrade its IT systems. It adopted SAP's enterprise resource planning (ERP) system buttressed with supply chain and replenishment planning tools from JDA Software. The company wanted to leverage its point-of-sale (POS) data so that customer purchases would automatically trigger orders to replenish stock. The new software included tools for better demand planning, fulfillment, space and category management, production planning, collaboration, and transportation and logistics management.

These improvements, instituted between 2000 and 2005, resulted in an increase in the fill rate (the percentage of orders satisfied from stock at hand) from 92 to 99 percent, significantly decreasing the impact of stockouts on consumers. Inventory turns doubled, and average annual supply chain savings between 2 percent and 3 percent were realized.

Two key factors enabled Scotts Miracle-Gro to better respond to rapid changes in market conditions: the ability to create POS forecasts and an increased adeptness at responding to weather events.

POS forecasts at the store level are the basis for Scott's demand planning, which then incorporates promotions, media and advertising campaigns, and stockout planning. These plans are further honed by integrating safety-stock settings, on-hand quantities, and on-order quantities for each store. Scotts Miracle-Gro's supply chain is segmented by warehouse. The individualized store replenishment plans are aggregated for each warehouse so that enough product is produced to properly stock them.

Weather-related impacts are translated into plans of action for each zip code on a day-by-day and weekly basis. JDA Demand is integrated with business weather intelligence pioneer Planalytics' database of regional and seasonal weather patterns and analytical program. The improved ability to anticipate weather patterns and make sound inventory decisions also ensures that promotions are properly timed to maximize revenue increases for the company's retail partners and market share for the company.

In addition to supply chain segmentation by warehouse, Scotts Miracle-Gro also segments by product. Multiple product-centered supply chains are customized to meet the needs of its retail accounts. Scotts has over 40 production facilities as well as a number of contract manufacturers, 18 of its own distribution centers, and over 10 more third-party distribution centers. Depending on the product and the volume driving it, shipments can go to one of the distribution centers or directly to retailers. Maximizing supply chain efficiency has enhanced customer service and reduced costs, a particularly important consideration for its top three customers—Walmart, Home Depot, and Lowe's. Approximately two-thirds of Scotts Miracle-Gro's annual revenues come from these companies. Regional distribution networks complement direct shipments to these crucial customers.

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SECTION-B

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strategically located close to Scotts Miracle-Gro's highest-volume purchasers. If necessary, products from the main distribution network can be shipped to one of these production points for joint delivery. For example, a shipment of a grain product can be combined with a fertilizer delivery. An assortment of supply chain possibilities is essential to the company's business model due to the abbreviated time-frame in which most shipments occur.

With the new system in place, Scotts Miracle-Gro concentrated on strengthening its collaborative practices. Supply chain managers, sales teams, and customers needed to be working together so that the 100-day peak season could be optimally supplied. A business development team in the corporate office works with business development teams for each of the big three customers as well as with a channel accounts team. Pre-season inventory planning includes previous year POS data analysis and forecasting, setting inventory targets, and creating promotional lists. Forecasts are generated both internally and externally, with consensus meetings resolving any inconsistencies. Inventory buildups and reductions are likewise determined collaboratively with calendars constructed for each customer and consensus established for system settings such as buffer stocks and minimum order quantities.

In many cases, replenishment orders are prearranged, and Scotts Miracle-Gro also reports and tracks inventory, POS data, and forecasts for its customers, particularly during the peak season. By taking charge of customer data, Scotts has improved its insight into customer needs and gained greater flexibility in meeting those needs. A channel account and JDA Marketplace Replenishment are used to place orders directly within customers' systems, even the big three. At all times, the goal is to ensure that POS and inventory targets are aligned. If Scott's JDA or POS

forecasts differ from what the customer believes is going to happen, the demand signals are reevaluated and a consensus reached. This mindset guides internal discussions as well, for example, between the sales team and the financial forecasters, so that sufficient inventory maximizes sales and excess inventory does not clog shelves when the season ends.

JDA Software solutions, including JDA Demand, JDA Fulfillment, JDA Inventory Policy Optimization, and JDA Marketplace Replenish, have enabled Scotts Miracle-Gro to develop consumer-driven demand planning that reduces new item introduction uncertainty and overcomes unrealistic forecasts by retailers. Continued attentiveness to its supply chain served both the company and its customers well during the Great Recession of 2009 and its aftermath. Retail challenges during tough economic times have been mitigated by Scotts Miracle-Gro's ability to keep costs down and improve margins. By incorporating weather-driven demand into its demand planning, strategically segmenting its supply chain, and focusing on customer collaboration programs, the company has been able to capitalize on shelf-level demand signals to improve manufacturing and distribution plans. It is now concentrating on developing commodity management tools to reduce the risk involved in its many products affected by fluctuations in commodity prices. Continuing to squeeze operating costs out of its products and distribution network will also support Scotts Miracle-Gro's exploration of emerging markets in China and Mexico, where it has already prepared the ground for a highly efficient supply chain.

Sources: Chris Petersen, "Scotts Miracle-Gro," SupplyChain World, accessed May 25, 2014; "Cultivating Shelf-Connected Success," JDA Software Case Study, 2013; "Scotts Miracle-Gro: Keeping up with peak demand," SupplyChain 24/7, April 1, 2013.

CASE STUDY QUESTIONS (15 MARKS)

1. Identify the supply chain management problems faced by Scotts Miracle-Gro. What was the business impact of not being able to manage the company's supply chain well? (4 MARKS)
2. What management, organization, and technology factors contributed to Scotts Miracle-Gro's supply chain problems? (4 MARKS)
3. How did implementing JDA Software solutions change the way Scotts Miracle-Gro ran its business? (3 MARKS)
4. How did the new supply chain systems improve management decision making? Describe two decisions that were improved by the new system solution. (4 MARKS)